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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,197	01/04/2005	Hendrik Josephus Goossens	NL 020630	2708

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BRIARCLIFF MANOR, NY 10510

EXAMINER

PATEL, GAUTAM

ART UNIT	PAPER NUMBER
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2627

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,197

Applicant(s)

GOOSSENS ET AL.

Examiner

Gautam R. Patel

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. Claims 1-8 are pending for the examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

Specification

3. The disclosure is objected for following reasons.

The title of the invention is neither precise nor descriptive. A new title is required which should include, using twenty words or fewer, claimed features that differentiate the invention from the Prior Art. It is recommended that the title should reflect the gist of or the improvement of the present invention.

Correction is required.

Claim Rejections - 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8 are rejected under 35 U.S.C. § 102(e) as being anticipated by Szita et al., US. Patent 6,985,327 (hereafter Szita).

As to claim 1, Szita discloses the invention as claimed, a lens driving device for an optical read and/or write system [see Figs. 2-4] including a mechanical structure, an actuator and a further actuator, comprising:

a mechanical structure [fig. 2] having an objective lens [fig. 2, unit 210], and an actuator [fig. 2, unit 212] for controlling the lens position by acting on the mechanical structure, characterized in that the lens driving device comprises a further actuator [fig. 2, unit 206] on or near the mechanical structure for acting on the mechanical structure so as to generate at a

frequency range a motion of or in the mechanical structure, to at least partially compensate motion generated by the first-mentioned actuator [col. 4, line 9 to col. 3, line 65].

5. The aforementioned claim 2, recites the following elements, inter alia, disclosed in Szita: the further actuator is designed in such a way that it predominantly excites the resonance frequency that is to be cancelled [col. 4, line 9 to col. 3, line 65].

6. The aforementioned claim 3, recites the following elements, inter alia, disclosed in Szita: the actuator comprises a piezo-electric element [col. 4, line 9 to col. 3, line 65].

NOTE: Szita does not use word piezo-electric to describe his actuators. However in system like these piezo-electric actuators are inherently used because of their thin structures.

7. The aforementioned claim 4, recites the following elements, inter alia, disclosed in Szita: the further actuator comprises a piezo-electric element. [col. 4, line 9 to col. 3, line 65].

NOTE: Szita does not use word piezo-electric to describe his actuators. However in system like these piezo-electric actuators are inherently used because of their thin structures.

8. The aforementioned claim 5, recites the following elements, inter alia, disclosed in Szita: a lens driving device comprising a mechanical structure [fig. 2] having an objective lens [fig. 2, unit 210], and an actuator [fig. 2, unit 212] for controlling the lens position by acting on the mechanical structure, the system further comprising a controller means [fig. 3, unit 312] for generating a control signal for the actuator, the actuator acting in response to the control signal, characterized in that the lens driving device comprises a further actuator [fig. 2, unit 206] on or near the mechanical structure for acting on the mechanical structure so as to generate at a frequency range a motion of or in the mechanical structure, to at least partially compensate motion generated by the first-mentioned actuator, the controller means comprising means for generating a compensation signal for said further actuator. [col. 4, line 9 to col. 3, line 65].

9. The aforementioned claim 6, recites the following elements, inter alia, disclosed in Szita:

the further actuator is designed in such a way that it predominantly excites the resonance frequency that is to be cancelled. [col. 4, line 9 to col. 3, line 65].

10. The aforementioned claim 7, recites the following elements, inter alia, disclosed in Szita: the actuator comprises a piezo-electric element. [col. 4, line 9 to col. 3, line 65].

NOTE: Szita does not use word piezo-electric to describe his actuators. However in system like these piezo-electric actuators are inherently used because of their thin structures.

11. The aforementioned claim 8, recites the following elements, inter alia, disclosed in Szita: the further actuator comprises a piezo-electric element. [col. 4, line 9 to col. 3, line 65].

NOTE: Szita does not use word piezo-electric to describe his actuators. However in system like these piezo-electric actuators are inherently used because of their thin structures.

ALTERNATE REJECTION/ 102/103

12. Claims 1-2, 5-6 are rejected under 35 U.S.C. § 102(e) as being anticipated by Szita et al., US. Patent 6,985,327 (hereafter Szita).

As to claim 1, Szita discloses the invention as claimed, a lens driving device for an optical read and/or write system [see Figs. 2-4] including a mechanical structure, an actuator and a further actuator, comprising:

a mechanical structure [fig. 2] having an objective lens [fig. 2, unit 210], and an actuator [fig. 2, unit 212] for controlling the lens position by acting on the mechanical structure, characterized in that the lens driving device comprises a further actuator [fig. 2, unit 206] on or near the mechanical structure for acting on the mechanical structure so as to generate at a frequency range a motion of or in the mechanical structure, to at least partially compensate motion generated by the first-mentioned actuator [col. 4, line 9 to col. 3, line 65].

13. The aforementioned claim 2, recites the following elements, inter alia, disclosed in Szita:

the further actuator is designed in such a way that it predominantly excites the resonance frequency that is to be cancelled [col. 4, line 9 to col. 3, line 65].

14. The aforementioned claim 5, recites the following elements, inter alia, disclosed in Szita: a lens driving device comprising a mechanical structure [fig. 2] having an objective lens [fig. 2, unit 210], and an actuator [fig. 2, unit 212] for controlling the lens position by acting on the mechanical structure, the system further comprising a controller means [fig. 3, unit 312] for generating a control signal for the actuator, the actuator acting in response to the control signal, characterized in that the lens driving device comprises a further actuator [fig. 2, unit 206] on or near the mechanical structure for acting on the mechanical structure so as to generate at a frequency range a motion of or in the mechanical structure, to at least partially compensate motion generated by the first-mentioned actuator, the controller means comprising means for generating a compensation signal for said further actuator. [col. 4, line 9 to col. 3, line 65].

15. The aforementioned claim 6, recites the following elements, inter alia, disclosed in Szita: the further actuator is designed in such a way that it predominantly excites the resonance frequency that is to be cancelled. [col. 4, line 9 to col. 3, line 65].

Claim Rejections - 35 U.S.C. § 103

16. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4 and 7-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Szita as applied to claims 1-2, 5-6 above and further in view of Takekado et al., US. Patent 5,745,319 (hereafter Takekado).

As to claims 3-4 and 7-8, Szita discloses all of the above elements including dual actuators and one partially compensating the other. Szita is silent about the type of the actuator being used in the system or that the type of the actuator is a piezo-electric element.

However, use of a piezo-electric element as an actuator is well known in the art for along time because of their ability to function in tight spaces. Also more importantly Takekado clearly discloses that the

the actuator comprises a piezo-electric element [col. 4, line 9 to col. 3, line 65].
Col. 7, line 63 to col. 8, line 48].

Both Szita and Takekado are interested in improving and controlling the dual actuator mechanism in a magneto/optical disk device.

One of ordinary skill in the art at the time of invention would have realized that the dual actuator of Szita could use higher reliability and performance.

Therefore, it would have been obvious to have used a piezo-electric element as an actuator in the system of Szita as taught by Takekado because one would be motivated to reduce distortions due to flying surface and improve reliability and provide higher performance by providing thinner piezo-electric element in the system of Szita [col. 8, lines 27-33; Takekado].

Other prior art cited

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Sugaya et al. (US. Patent 5870634)
- b) Wakui (US. patent 6378672)

Contact information

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2600) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, can be reached on (571) 272-7023.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.



GAUTAM R. PATEL
PRIMARY PATENT EXAMINER

Gautam R. Patel
Primary Patent Examiner
Group Art Unit 2627

February 23, 2008